



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Christian Vial et al

Confirmation No: 5096

Application No.: 10/680,138

Group Art Unit: 1743

Filed: Oct 8, 2003

Examiner: Monique T. Cole

For: SPIRO COMPOUNDS AS PERFUMING
INGREDIENTS

Attorney Docket No.: 81455-5780

RULE 132 DECLARATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam:

I, Pierre-Alain Blanc, hereby submit the following comments as a person of ordinary skill in the art of the subject matter of this application:

1. I have a doctorate in Chemistry and over 26 years experience as perfumer. I am presently working at Firmenich, SA, the assignee of the present application. Over the past twenty-six years, I have been actively involved in research regarding the use of emulsions in perfuming compositions and the evaluation of such emulsions. I currently hold the position of chairman of an evaluation panel of expert and my specific duties include the assessment of the interest and commercial potential of new fragrance materials.

2. I am familiar with the present invention, its claims and the office actions that include rejections of such claims.

3. The present invention relates to compounds that when added to a perfuming composition or perfume, the compound provides a woody and/or aromatic odor character note. In particular the woody character imparted by these compounds has typically a amber, rooty and/or precious woods connotation. The aromatic character imparted by these

compounds has typically a herbs/balsam connotation (lavender, eucalyptus, clary-sage, etc ...) (see also paragraphs [0058] to [0062] of the present application). Furthermore, and more precisely, the compounds having two 6 member rings (spiro-undecane derivatives) have odors of the woody/aromatic type cited above, and the compounds having one 6 member ring and one 5 member ring (spiro-decane derivatives) have odors of the woody type cited above.

4. I understand that the claims were rejected as being unpatentable over U.S. Patents No. 4,639,330 to Sprecker et al, which disclose spiro-decane derivatives and in particular mixture of 10-butyl-(8 or 7)-methyl-spiro(4,5)dec-7-en-1-one or of 10- isopropyl -(8 or 7)-methyl-spiro(4,5)dec-7-en-1-one. Claim 6 was also rejected as being unpatentable over U.S. Patents No. 4,052,457 to Nagakura et al, which disclose a spiro-undecane derivative, in particular 3,7,11,11-tetramethyl-spiro[5,5]-undeca-8-ene-1-one.

5. The office action assumes that since the present compounds differ from that of Sprecker or Nagakura only by the presence of additional CH₂ groups or by a different location of the substituents, there is a presumed expectation of similar properties because the compounds are homologues. This presumption is incorrect because these compounds have significantly different properties and utilities. Although both compounds are useful as perfuming ingredients, the present compounds have distinctly different odor properties and organoleptic utilities.

6. The prior art compounds disclosed by Sprecker have odors characterized by a typical floral, fruity and minty character. The woody undernotes, also mentioned in Sprecker documents) are too weak to impart a woody character to the odor of such compounds and are also of the sweet type. The prior art compound disclosed by Nagakura has an odor wherein, despite the flavor described in the relative disclosure, the powdery-violet-sweet and floral character dominate.

7. Therefore, the character of the odor properties of the present compounds differs from those of the prior art by having a woody character, of ambery, rooty and/or precious woods connotation, and or an aromatic character, of herbs/balsam connotation. The inventive compounds also differ from Sprecker by not having a floral/fruit character. These differences are all the more surprising and unexpected since the present compounds have odor characteristics

that are substantially different from what is provided by the compounds of the cited references. Furthermore, the different odor character of the present compounds is not ascertainable from or suggested by Sprecker or Nagakura, nor are they obvious or extrapolatable from the compounds disclosed in Sprecker or Nagakura. Indeed, there is nothing in Sprecker or Nagakura that leads a skilled artisan to foresee the presently claimed odor character simply based on the structural similarity of the prior art compound.

8. There is no doubt in my mind whatsoever, that the compound of formula (I) has an odor which is different from that of Sprecker or Nagakura, in spite of the fact that they have very close structures. These two compounds, as such, are well suited for different end use applications: indeed the present compound (I) is particularly well fitted to be incorporated into preparation wherein it is useful to impart/provide woody and or aromatic tonalities, while the prior art compounds are more fitted to be incorporated into preparation wherein it is useful to impart/provide sweet, floral tonalities. In other words the compounds of the invention and those of the cited prior art are useful for different purposes.

9. In this art, a skilled artisan cannot rely on structural closeness to predict the organoleptic characteristics of a specific compound, or the usefulness of the odor properties of the compound. Therefore, although the prior art and present compounds are related as structural homologues differing in the position of the double bond, the compounds are actually of different nature, with different properties and organoleptic utilities, and any presumption of property similarities between the compounds should be overcome.

I further declare that all statements made in this declaration of my own knowledge are true and that all statements made on information and belief are believed to be true ; and further these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated this 28th day of June, 2006

